

### Abstract

A method and an apparatus for analyzing a portion of a sample, such as a minute pattern formed on a semiconductor substrate, by employing a Fast Fourier Transformation (FFT) method, in which a magnified image of a region of a sample to be analyzed is generated and converted into data having a frequency by the FFT method. The converted data are analyzed to determine whether the region of the sample is normal or abnormal. It is possible to measure and analyze the sample simultaneously and automatically by using the apparatus in accordance with the method for analyzing the sample.